REMARKS

I. Preliminary Matters

Claims 2-4, 6, 7, 9-11, 13 and 14 are pending in the application, and all the claims are rejected.

Applicants thank the Examiner for withdrawal of the following rejections from the Non Final Office Action dated November 12, 2008, in light of the Amendment under 37 C.F.R. § 1.111 filed March 12, 2009:

(i) The objection to claims 5-7 and 12-14 as being in improper dependent form;

(ii) The 35 U.S.C. § 102(b) rejection of claims 1, 2, 7-11, 13, 14 as allegedly being anticipated by Iijima et al "Nano-aggregates of single-walled graphitic carbon nano-horns";

(iii) The 35 U.S.C. § 103(a) rejection of claims 3-4, and 6 as allegedly being unpatentable over Iijima in view of Makoto et al, JP 2000-249540;

(iv) The 35 U.S.C. § 103(a) rejection of claims 5 and 12 as allegedly being unpatentable over Makoto and further in view of Mineta; and,

(v) The non-statutory obviousness-type double patenting rejections based on co-pending applications 10/556,088, 10/544,400, 10/560,593, and 10/544,133.

Claim 1 is amended to recite that the moving unit for the target holder has separate moving parts for movement of the holder in a direction parallel to and perpendicular to the central axis of the target holder. Support for the amendment can be found, for example, at pages 14-16 and Figs. 4 and 5 of the present specification.

No new matter is added, and the Amendment is bring filed concurrently with a Request for Continued Examination. Accordingly, Applicants respectfully request entry of the Amendment as being appropriate.

II. Response to Claim Rejections Under 35 U.S.C. § 103(a)

A. Claims 2 and 7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Iijima.

B. Claims 9-11, 13-14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over based on Iijima, in view of Mineta.

C. Claims 3-4, and 6 rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Iijima in view of Makoto.

Applicants respectfully submit that claims 2-4, 6, 7, 9-11, 13 and 14 are patentable over Iijima, Mineta and Makoto, individually, or in any reasonable combination with each other, at least for the following reasons.

Amended claim 1 recites that the moving unit for moving the target holder has separate moving parts to move the target holder in a parallel and perpendicular direction to the central axis of the target holder. In contrast, none of Iijima, Mineta or Makato disclose separate moving units for moving the target holder in parallel and perpendicular directions.

Moreover, the subject matter of claim 9, and method claims dependent thereof, is not taught or suggested in Iijima, Mineta or Makato. Specifically, the limitation "irradiating light to a surface of a cylindrical graphite target at a substantially constant irradiating angle" in the present invention is achieved by moving the target in both perpendicular and parallel directions

with respect to the central axis of the target. The above limitation is not taught or suggested in Iijima, Mineta or Makato.

Additionally, Applicants would like to point out that although at page 5, lines 2-4 of the Office Action, the Examiner maintains that "[a]t the time of invention it would have been obvious to a person of ordinary skill in the art to use the method of Iijima and include the movement of friction rollers up or down in view of the teaching of Mineta", Mineta fails to teach the use of "friction rollers." Therefore, even if the disclosure of Iijima is combined with the technical idea of Mineta, the combination still lacks motivation to employ friction rollers to move the graphite target for holding the graphite rod and rotating the graphite rod in a controlled and stable manner. See page 14, lines 15 to 19 of the specification.

Accordingly, Applicants respectfully submit that it would not have been obvious to a person of ordinary skill in the art to modify any of the inventions of Iijima, Mineta or Makato to arrive at the presently claimed invention. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103 rejections of claims 2-4, 6,7, 9-11, 13 and 14.

III. Response to Provisional Claim Rejection Under the Doctrine of Non Statutory Obviousness-Type Double Patenting

Claims 2-4 and 6-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1-8 of copending Application No. 10/555,064.

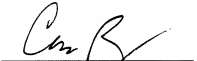
Applicants respectfully defer responding to the provisional double patenting rejection until the claims are otherwise in condition for allowance.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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